

chain nodes :

7 8 9 10 11

ring nodes :

1 2 3 4 5 6

chain bonds :

1-11 2-7 6-8 7-9 8-10

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6

exact/norm bonds :

7-9 8-10

exact bonds :

1-11 2-7 6-8

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS  
11:CLASS

## RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2001:380438 CAPLUS  
 DOCUMENT NUMBER: 135:24657  
 TITLE: Selective cellular targeting: multifunctional delivery vehicles  
 INVENTOR(S): Glazier, Arnold  
 PATENT ASSIGNEE(S): Drug Innovation & Design, Inc., USA  
 SOURCE: PCT Int. Appl., 981 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

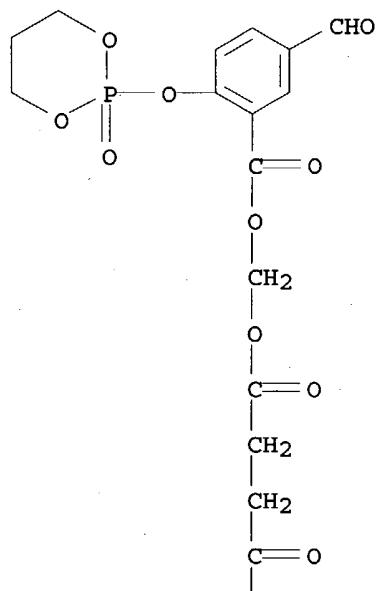
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001036003	A2	20010525	WO 2000-US31262	20001114 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2001016075	A5	20010530	AU 2001-16075	20001114 <--
EP 1255567	A1	20021113	EP 2000-978631	20001114
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2003138432	A1	20030724	US 2000-738625	20001215
PRIORITY APPLN. INFO.:			US 1999-165485P	P 19991115
			US 2000-239478P	P 20001011
			US 2000-241937P	P 20001020
			WO 2000-US31262	W 20001114
			US 2000-712465	B1 20001115

AB The present invention relates to the compns., methods, and applications of a novel approach to selective cellular targeting. The purpose of this invention is to enable the selective delivery and/or selective activation of effector mols. to target cells for diagnostic or therapeutic purposes. The present invention relates to multi-functional prodrugs or targeting vehicles wherein each functionality is capable of enhancing targeting selectivity, affinity, intracellular transport, activation or detoxification. The present invention also relates to ultralow dose, multiple target, multiple drug chemotherapy and targeted immunotherapy for cancer treatment.

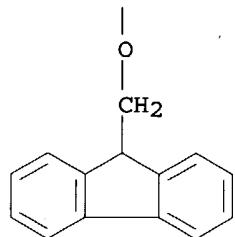
IT 341551-64-2P 341551-65-3P 341551-67-5P  
 341551-68-6P 341551-75-5P 341552-54-3P  
 RL: PNU (Preparation, unclassified); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (multifunctional delivery vehicles for selective cellular targeting of drugs)

RN 341551-64-2 CAPLUS  
 CN Butanedioic acid, 9H-fluoren-9-ylmethyl [[5-formyl-2-[(2-oxido-1,3,2-dioxaphosphorinan-2-yl)oxy]benzoyl]oxy]methyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

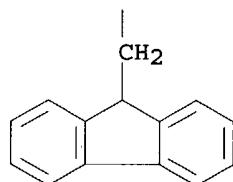
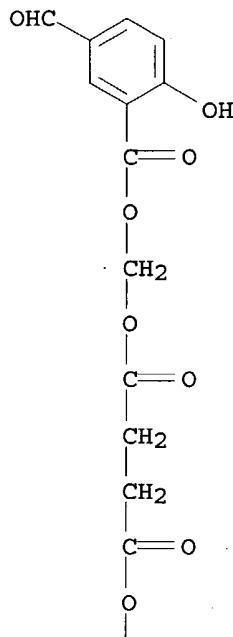


PAGE 2-A



RN 341551-65-3 CAPLUS

CN Butanedioic acid, 9H-fluoren-9-ylmethyl [(5-formyl-2-hydroxybenzoyl)oxy]methyl ester (9CI) (CA INDEX NAME)



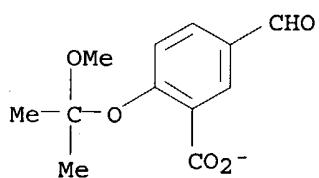
RN 341551-67-5 CAPLUS

CN Ethanaminium, N,N,N-triethyl-, salt with 5-formyl-2-(1-methoxy-1-methylethoxy)benzoic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 341551-66-4

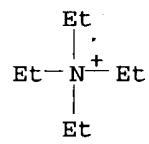
CMF C12 H13 O5



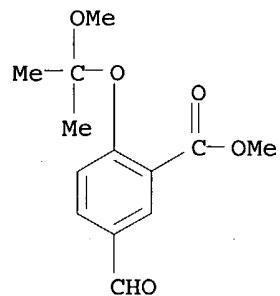
CM 2

CRN 66-40-0

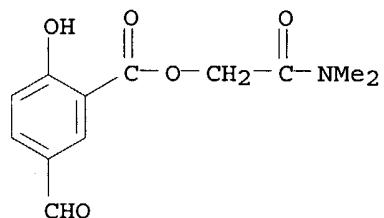
CMF C8 H20 N



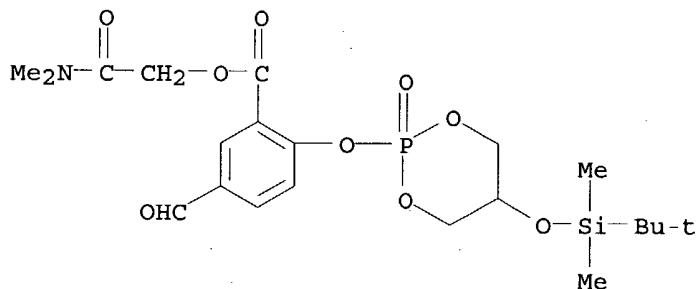
RN 341551-68-6 CAPLUS  
 CN Benzoic acid, 5-formyl-2-(1-methoxy-1-methylethoxy)-, methyl ester (9CI)  
 (CA INDEX NAME)



RN 341551-75-5 CAPLUS  
 CN Benzoic acid, 5-formyl-2-hydroxy-, 2-(dimethylamino)-2-oxoethyl ester  
 (9CI) (CA INDEX NAME)



RN 341552-54-3 CAPLUS  
 CN Benzoic acid, 2-[[5-[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-oxido-1,3,2-dioxaphosphorinan-2-yl]oxy]-5-formyl-, 2-(dimethylamino)-2-oxoethyl ester  
 (9CI) (CA INDEX NAME)



L7 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:61843 CAPLUS

DOCUMENT NUMBER: 134:260866

TITLE: Identification of a novel class of small-molecule antiangiogenic agents through the screening of combinatorial libraries which function by inhibiting the binding and localization of proteinase MMP2 to integrin  $\alpha V\beta 3$

AUTHOR(S): Boger, Dale L.; Goldberg, Joel; Silletti, Steve; Kessler, Torsten; Cheresh, David A.

CORPORATE SOURCE: Departments of Chemistry Immunology and Vascular  
Biology, The Skaggs Institute for Chemical Biology The  
Scripps Research Institute, La Jolla, CA, 92037, USA  
SOURCE: Journal of the American Chemical Society (2001  
( ), 123(7), 1280-1288  
PUBLISHER: CODEN: JACSAT; ISSN: 0002-7863  
American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 134:260866

AB The process of new blood vessel growth from existing vasculature, known as angiogenesis, is critical to several pathol. conditions, most notably cancer. Both MMP2, which degrades the extracellular matrix (ECM), and integrin  $\alpha V\beta 3$ , which contributes to endothelial cell attachment to the ECM, are critically involved in this process. Recent findings have shown that MMP2 is localized in an active form on the surface of invasive endothelial cells based on its ability to directly bind integrin  $\alpha V\beta 3$ , suggesting that disrupting this protein-protein interaction may represent a new target for the development of angiogenesis inhibitors. The screening of small mol. libraries led to the identification of compds. which disrupt the MMP2- $\alpha V\beta 3$  interaction in an in vitro binding assay. A prototypical inhibitor was further found to prevent the degradation of the protein matrix without directly inhibiting MMP2 activity or disrupting the binding of  $\alpha V\beta 3$  to its classical ECM ligand, vitronectin. The synthesis and screening of analogs and substructures of this lead compound allowed the identification of requisite structural features for inhibition of MMP2 binding to  $\alpha V\beta 3$ . This led to the synthesis of a more water-soluble derivative which maintains the in vitro biol. properties and has potent antiangiogenic and antitumor activity in vivo, validating the target as one useful for therapeutic intervention.

IT 331714-07-9P 331714-10-4P 331714-16-0P

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses)

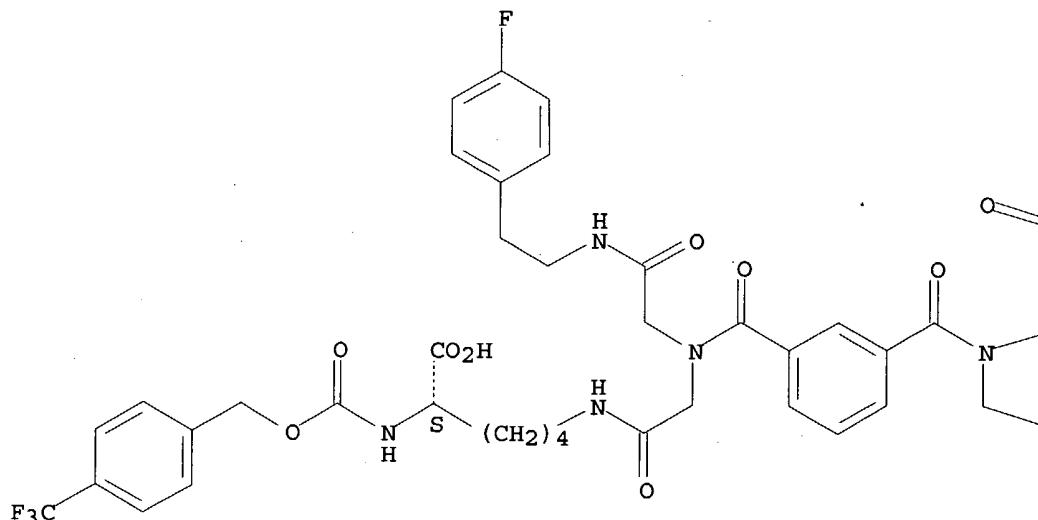
(identification of novel class of small-mol. antiangiogenic agents through screening of combinatorial libraries)

RN 331714-07-9 CAPLUS

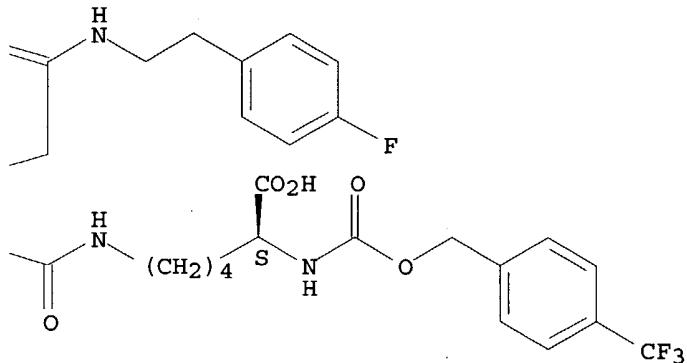
CN L-Lysine, 1,1'-(1,3-phenylenedicarbonyl)bis[N6-[N-[2-[[2-[(4-fluorophenyl)ethyl]amino]-2-oxoethyl]glycyl]-N2-[[[4-(trifluoromethyl)phenyl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

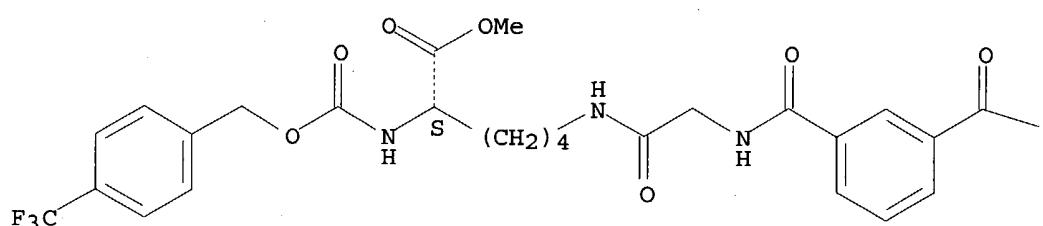


RN 331714-10-4 CAPLUS

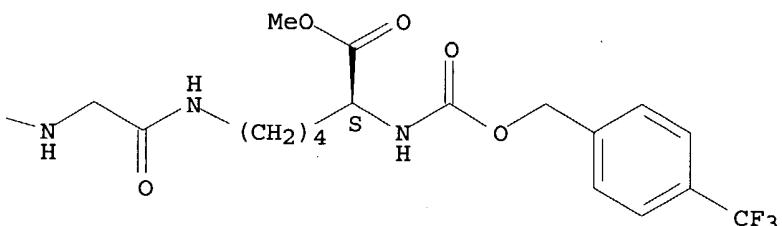
CN L-Lysine, N6,N6'-[1,3-phenylenebis[carbonylimino(1-oxo-2,1-ethanediyl)]bis[N2-[[[4-(trifluoromethyl)phenyl]methoxy]carbonyl]-, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L7 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:456916 CAPLUS

DOCUMENT NUMBER: 133:68929

TITLE: Use of a matrix metalloproteinase inhibitor and an integrin antagonist in the treatment of neoplasia

INVENTOR(S): McKearn, John P.; Gordon, Gary; Cunningham, James J.; Gately, Stephen T.; Koki, Alane T.; Masferrer, Jaime L.

PATENT ASSIGNEE(S): G.D. Searle and Co., USA

SOURCE: PCT Int. Appl., 358 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 19

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000038719	A1	20000706	WO 1999-US30700	19991222 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CA 2356402	AA	20000706	CA 1999-2356402	19991222 <--
EP 1140183	A1	20011010	EP 1999-968942	19991222 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002533407	T2	20021008	JP 2000-590670	19991222
ZA 2001005055	A	20020920	ZA 2001-5055	20010620
ZA 2001005120	A	20020107	ZA 2001-5120	20010621
PRIORITY APPLN. INFO.:			US 1998-113786P	P 19981223
			WO 1999-US30700	W 19991222

AB Methods are provided to treat or prevent neoplasia disorders in a mammal using a combination of a matrix metalloproteinase inhibitor, an integrin antagonist, and an antineoplastic agent.

IT 280105-14-8

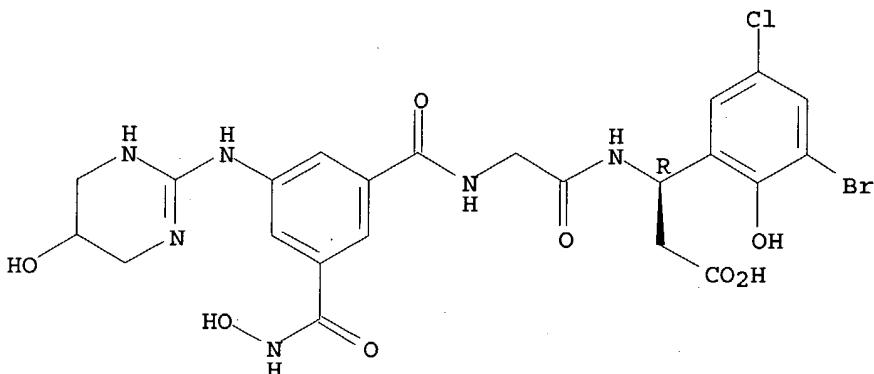
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(matrix metalloproteinase inhibitor and integrin antagonist in neoplasia treatment)

RN 280105-14-8 CAPLUS

CN  $\beta$ -Alanine, N-[3-[(hydroxyamino)carbonyl]-5-[(1,4,5,6-tetrahydro-5-hydroxy-2-pyrimidinyl)amino]benzoyl]glycyl-3-(3-bromo-5-chloro-2-hydroxyphenyl)-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2000:335229 CAPLUS  
 DOCUMENT NUMBER: 132:343358  
 TITLE: Cystine derivatives as therapeutic agents for matrix metalloprotease-related diseases  
 INVENTOR(S): Grams, Frank; Krell, Hans-Willi; Leinert, Herbert;  
 Zimmermann, Gerd  
 PATENT ASSIGNEE(S): Roche Diagnostics G.m.b.H., Germany  
 SOURCE: PCT Int. Appl., 20 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000027378	A2	20000518	WO 1999-EP8460	19991105 <--
WO 2000027378	A3	20010920		
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
BR 9915127	A	20010731	BR 1999-15127	19991105 <--
EP 1143960	A2	20011017	EP 1999-971709	19991105 <--
EP 1143960	A3	20011205		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
JP 2002529404	T2	20020910	JP 2000-580607	19991105
ZA 2001003605	A	20011211	ZA 2001-3605	20010504 <--
PRIORITY APPLN. INFO.:			EP 1998-121073	A 19981106
			WO 1999-EP8460	W 19991105

OTHER SOURCE(S): MARPAT 132:343358

AB Pharmaceutical compns. are disclosed which contain nonpeptidic cystine derivs. R1ANHCH[CH2SSCH2CH(R3ANH) (C(O)NHR4)]C(O)NHR2 [R1, R3 = H, (non)aromatic carbocyclic or heterocyclic ring, (un)branched (un)saturated C1-15 alkyl which can be interrupted by hetero atom and which can be substituted by (non)aromatic carbocyclic or heterocyclic ring; R2, R4 = H, (un)branched (un)saturated C1-15 alkyl which can be interrupted by hetero atom and which can be substituted by (non)aromatic carbocyclic or heterocyclic ring; A = valency bond, CO, SO<sub>2</sub>, NHCO, NHCS or OC(O)], their pharmacol. acceptable salts and optically active forms thereof and pharmaceutically acceptable carriers, for the treatment of diseases selected from tumor growth and metastasis; inflammatory diseases, e.g. osteo- and rheumatoid arthritis; osteoporosis; multiple sclerosis; periodontitis; restenosis; diseases caused by bacteria, e.g. meningitis; sun-induced skin aging; and Alzheimer's disease. New compds. are also disclosed.

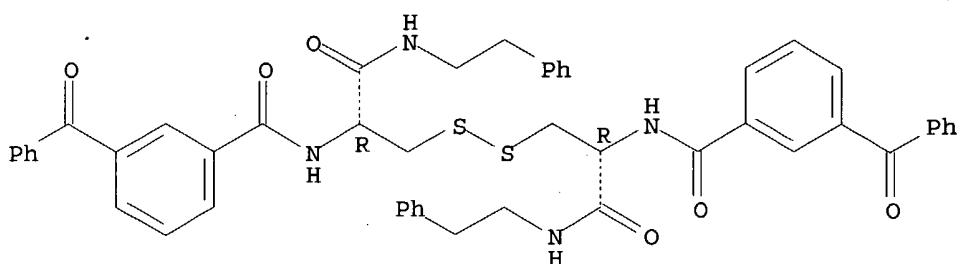
IT 269067-09-6P 269067-10-9P 269067-11-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (cystine derivative for treatment of matrix metalloprotease-related disease)

RN 269067-09-6 CAPLUS

CN Benzamide, N,N'-(dithiobis[(1R)-1-[(2-phenylethyl)amino]carbonyl]-2,1-ethanediyl]bis[3-benzoyl- (9CI) (CA INDEX NAME)

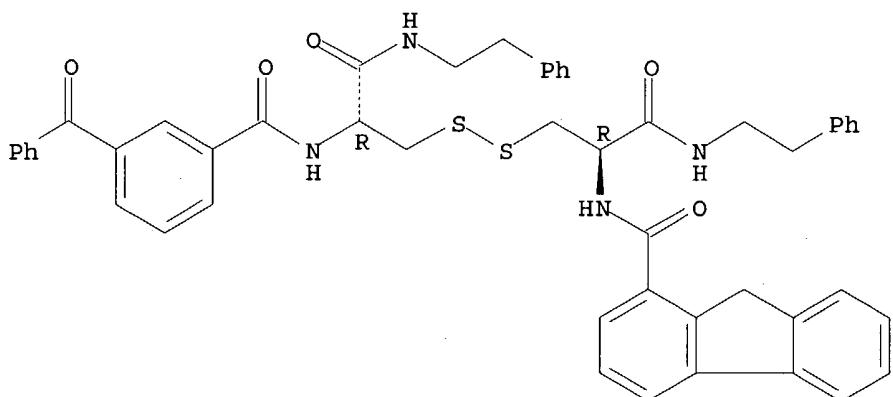
Absolute stereochemistry.



RN 269067-10-9 CAPLUS

CN 9H-Fluorene-1-carboxamide, N-[(1R)-1-[[[(2R)-2-[(3-benzoylbenzoyl)amino]-3-oxo-3-[(2-phenylethyl)amino]propyl]dithio]methyl]-2-oxo-2-[(2-phenylethyl)amino]ethyl]- (9CI) (CA INDEX NAME)

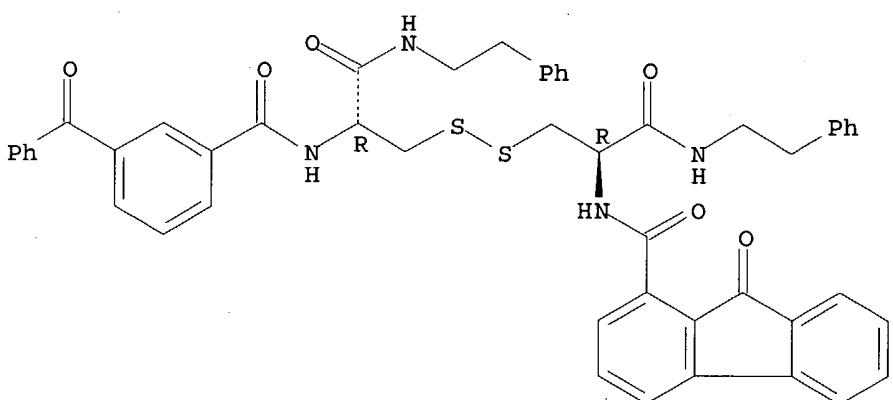
Absolute stereochemistry.



RN 269067-11-0 CAPLUS

CN 9H-Fluorene-1-carboxamide, N-[(1R)-1-[[[(2R)-2-[(3-benzoylbenzoyl)amino]-3-oxo-3-[(2-phenylethyl)amino]propyl]dithiol]methyl]-2-oxo-2-[(2-phenylethyl)amino]ethyl]-9-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:495123 CAPLUS

DOCUMENT NUMBER: 131:129760

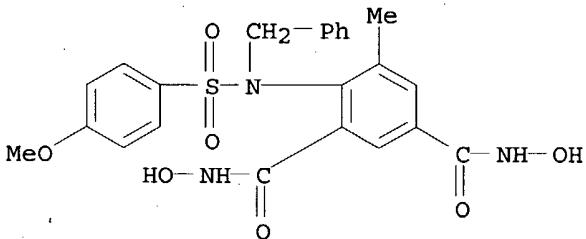
TITLE: Preparation of sulfonamidobenzenehydroxamates and analogs as matrix **metalloproteinase** and TACE inhibitors

INVENTOR(S): Levin, Jeremy Ian; Du, Mila T.; Venkatesan, Aranapakam Mudumbai; Nelson, Frances Christy; Zask, Arie; Gu, Yansong

PATENT ASSIGNEE(S): American Cyanamid Co., USA

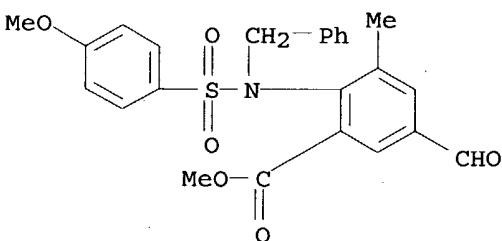
SOURCE: U.S., 68 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5929097	A	19990727	US 1997-944593	19971006 <--
PRIORITY APPLN. INFO.:			US 1996-28504P	P 19961016
OTHER SOURCE(S): MARPAT 131:129760				
AB	RSO <sub>2</sub> N(CH <sub>2</sub> R <sub>7</sub> )ZCONHOH [I; R = (un)substituted (hetero)aryl; R <sub>7</sub> = H, alkyl, Ph, etc.; Z = (un)substituted phenylene or -naphthylene] were prepared. Thus, 2-(H <sub>2</sub> N)C <sub>6</sub> H <sub>4</sub> CO <sub>2</sub> Me was amidated by 4-(MeO)C <sub>6</sub> H <sub>4</sub> SO <sub>2</sub> Cl and the N-benzylated product converted in 2 steps to I [R = C <sub>6</sub> H <sub>4</sub> (OMe)-4, R <sub>7</sub> = Ph, Z = 1,2-phenylene]. Data for biol. activity of I were given.			
IT	<b>206549-45-3P</b> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of sulfonamidobenzenehydroxamates and analogs as matrix metalloproteinase and TACE inhibitors)			
RN	206549-45-3 CAPLUS			
CN	1,3-Benzenedicarboxamide, N,N'-dihydroxy-4-[[[4-methoxyphenyl)sulfonyl](phenylmethyl)amino]-5-methyl-, disodium salt (9CI) (CA INDEX NAME)			

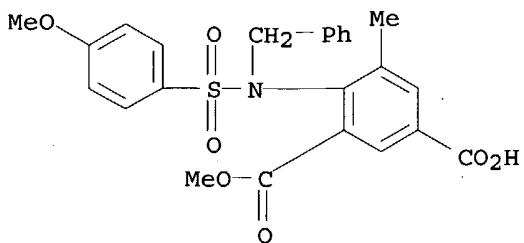


●2 Na

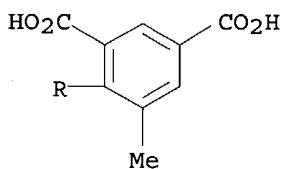
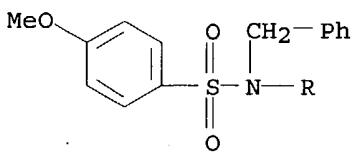
IT	<b>206549-41-9P 206549-42-0P 206549-43-1P</b> <b>206549-44-2P</b> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of sulfonamidobenzenehydroxamates and analogs as matrix metalloproteinase and TACE inhibitors)
RN	206549-41-9 CAPLUS
CN	Benzoic acid, 5-formyl-2-[[[4-methoxyphenyl)sulfonyl](phenylmethyl)amino]-3-methyl-, methyl ester (9CI) (CA INDEX NAME)



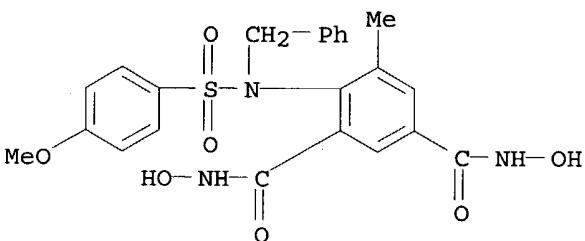
RN	206549-42-0 CAPLUS
CN	1,3-Benzenedicarboxylic acid, 4-[[[4-methoxyphenyl)sulfonyl](phenylmethyl)amino]-5-methyl-, 3-methyl ester (9CI) (CA INDEX NAME)



RN 206549-43-1 CAPLUS  
 CN 1,3-Benzenedicarboxylic acid, 4-[[[(4-methoxyphenyl)sulfonyl](phenylmethyl)amino]-5-methyl- (9CI) (CA INDEX NAME)



RN 206549-44-2 CAPLUS  
 CN 1,3-Benzenedicarboxamide, N,N'-dihydroxy-4-[[[(4-methoxyphenyl)sulfonyl](phenylmethyl)amino]-5-methyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1999:96248 CAPLUS  
 DOCUMENT NUMBER: 130:148689  
 TITLE: Phosphonated agents and their antiangiogenic and antitumorigenic use  
 INVENTOR(S): Collins, Delwood C.; Gagliardi, Antonio R.; Nickel, Peter  
 PATENT ASSIGNEE(S): University of Kentucky Research Foundation, USA  
 SOURCE: PCT Int. Appl., 74 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9905148	A1	19990204	WO 1998-US15470	19980724 <--
W: AU, CA, JP, MX RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9885915	A1	19990216	AU 1998-85915	19980724 <--
AU 739637	B2	20011018		
EP 1019419	A1	20000719	EP 1998-937133	19980724 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRIORITY APPLN. INFO.:			US 1997-899996 A	19970724
			WO 1998-US15470 W	19980724

OTHER SOURCE(S): MARPAT 130:148689

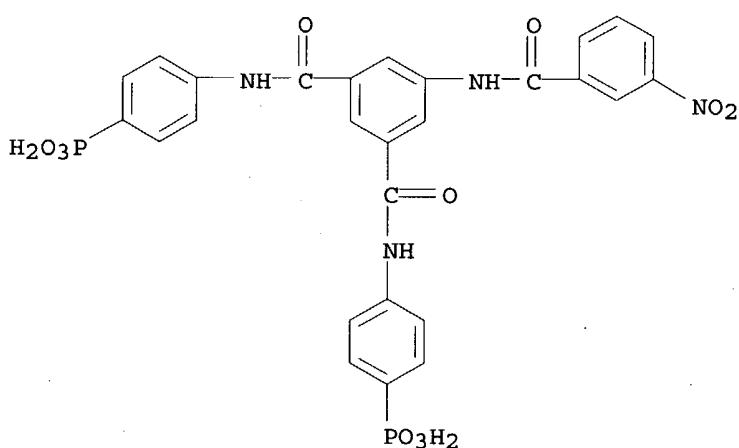
AB The present invention relates to novel phosphonic acid substituted agents and their pharmaceutical compns. Phosphonic acid substituted agents that are potent inhibitors of angiogenesis or tumorigenesis is defined by the following formula:  $(P-Yn1)m1-Q1-K-(Q2-(Yn2-P)m2)j$  ( $P$  = phosphonic group, phosphonic salt;  $Y$  =  $\text{OCO}$ ,  $\text{NR1CO}$ ,  $\text{CON(R1)R2}$ ;  $Q1$ ,  $Q2$  = aryl;  $K$  =  $H$ ,  $\text{NHCONH}$ ,  $\text{NHCSNH}$ ,  $\text{NHCOR3}$ ,  $\text{NHCSR3CSNH}$ ;  $j$ ,  $n1$ ,  $n2$  = 0-2;  $m1$ ,  $m2$  = 1-4;  $R1$  =  $H$ ,  $\text{CH}_2\text{CO}_2\text{H}$ , alkyl;  $R2$  = alkyl, aryl, alkaryl;  $R3$  = aryl). A pharmaceutical composition for the treatment of angiogenesis-dependent conditions or tumors comprises an effective amount of a phosphonic acid agent and a pharmaceutically acceptable carrier. Some of the phosphonic acid agents were more potent inhibitors of angiogenesis in the chick chorioallantoic membrane (CAM) assay and to human microvascular endothelial cell growth than suramin.

IT 220240-01-7

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(phosphonic acid agents and their antiangiogenic and antitumorigenic use)

RN 220240-01-7 CAPLUS

CN Phosphonic acid, [[5-[(3-nitrobenzoyl)amino]-1,3-phenylene]bis(carbonylimino-4,1-phenylene)]bis-, disodium salt (9CI) (CA INDEX NAME)



●2 Na

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:747616 CAPLUS

DOCUMENT NUMBER: 130:11982

TITLE: Fluorogenic protease substrates based on dye-dimerization

INVENTOR(S) : Wei, Ai-Ping; Williams, Michael G.  
 PATENT ASSIGNEE(S) : Minnesota Mining and Manufacturing Co., USA  
 SOURCE: PCT Int. Appl., 27 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9850579	A1	19981112	WO 1997-US16579	19970908 <--
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9743550	A1	19981127	AU 1997-43550	19970908 <--
EP 980440	A1	20000223	EP 1997-941691	19970908 <--
R:	CH, DE, FR, GB, IT, LI, SE			
CN 1254383	A	20000524	CN 1997-182147	19970908 <--
JP 2002506343	T2	20020226	JP 1998-548022	19970908
PRIORITY APPLN. INFO.:			US 1997-846828	A 19970501
			WO 1997-US16579	W 19970908

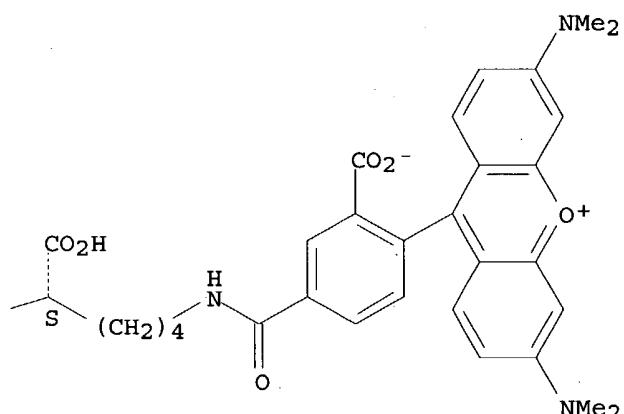
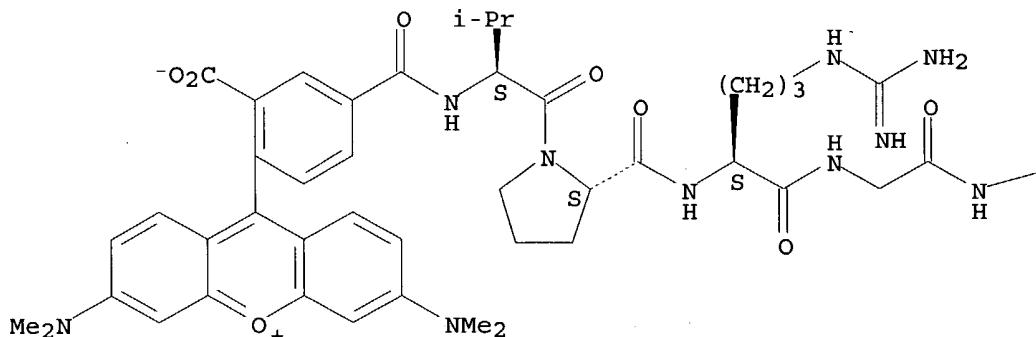
AB A method of biol. assay comprises the steps of providing an enzyme substrate comprising 2 fluorescence dye groups bound to a peptide, the dye groups being of proximity sufficiently close so as to essentially self-quench fluorescence of the dye groups, wherein self-quenching of fluorescence of the dye groups is effected by dye stacking, and enzymically cleaving the peptide to release the fluorescence dye groups from dye stacking, and producing an increase in fluorescence intensity. A protease substrate I (TMR-Val-Pro-Arg-Gly-Lys-TMR, TMR = tetramethylrhodamine) for use in the method of the invention is also disclosed. For a wide spectrum of excitation frequencies, fluorescence intensity of the cleaved substrate solution is as much as 29-fold that of the intact substrate solution, averaging from 25-28-fold the intensity, for emission wavelengths from 570 to 585 nm, a range easily visible to the human eye. This invention finds use in detection and identification of microorganisms, sterilization assurance, pharmaceutical discovery, enzyme assays, immunoassays, and other biol. assays. Use of the fluorogenic protease substrate I is demonstrated for the detection of *Vibrio parahaemolyticus*.

IT 216006-99-4  
 RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)  
 (fluorogenic protease substrates based on dye-dimerization)

RN 216006-99-4 CAPLUS

CN L-Lysine, N-[3-carboxy-4-[3,6-bis(dimethylamino)xanthyl]benzoyl]-L-valyl-L-prolyl-L-arginylglycyl-N6-[3-carboxy-4-[3,6-bis(dimethylamino)xanthyl]benzoyl]-, bis(inner salt) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:251153 CAPLUS

DOCUMENT NUMBER: 128:308308

TITLE: The preparation and use of ortho-sulfonamido aryl hydroxamic acids as matrix metalloproteinase and TACE inhibitors

INVENTOR(S): Levin, Jeremy Ian; Du Mila, T.; Venkatesan, Aranapakam Mudumbai; Nelson, Frances Christy; Zask, Arie; Gu, Yansong

PATENT ASSIGNEE(S): American Cyanamid Company, USA

SOURCE: PCT Int. Appl., 164 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9816503	A2	19980423	WO 1997-US18280	19971008 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ,				

VN, YU, ZW

RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,  
GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,  
GN, ML, MR, NE, SN, TD, TG

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AU 731737 B2 20010405

EP 938471 A1 19990901

EP 938471 B1 20011212

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,  
SI, LT, LV, FI, RO

BR 9712525 A 19991019 BR 1997-12525 19971008 <--

CN 1240429 A 20000105 CN 1997-180613 19971008 <--

JP 2001504809 T2 20010410 JP 1998-518448 19971008 <--

AT 210637 E 20011215 AT 1997-946246 19971008 <--

ES 2166102 T3 20020401 ES 1997-946246 19971008

PT 938471 T 20020531 PT 1997-97946246 19971008

ZA 9709233 A 19990415 ZA 1997-9233 19971015 <--

TW 410220 B 20001101 TW 1997-86114187 19971015 <--

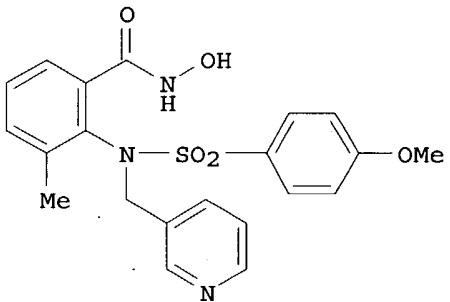
KR 2000049196 A 20000725 KR 1999-703294 19990415 <--

HK 1021178 A1 20020404 HK 2000-100090 20000106

PRIORITY APPLN. INFO.: US 1996-732631 A 19961016  
WO 1997-US18280 W 19971008

OTHER SOURCE(S) : MARPAT 128:308308

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